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A New Isopod of the Genus Accalathura (Crustacea) from the Okhotsk Sea*

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オホーツク海から発見された Accalathura 属 (等脚目甲殼類) の一新種

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1973年9月におこなわれた北海道沖オホーツク海における東海大学海洋学部の学生実習の際に採集されたウミナナフシ亜目等脚類の一種を,新種 Accalathura ochotensis (和名オオウミナナフシ)として記載した。体長43ミリに達する大型種で,複眼を欠き,両触角の節数がきわめて少なく,口器に剛毛が少ないことなどにより近縁の他種から区別される。なお,これは日本近海における本属の最初の記録である。

Hitherto, the isopod genus *Accalathura* (Anthuridea) has remained to be recorded in the crustacean fauna of Japan. On September 10, 1973, during practice of benthos for the Tokai University students, some anthurid specimens were collected from the Okhotsk sea, and later were placed at my disposal for identification through the courtesy of Prof. M. Yamada and Dr. T. Itô of Hokkaido University. At closer examinations, they have proved to represent a new species of the genus *Accalathura*. The specimens, preserved in alcohol, were dissected and examined in glycerol, and all the figures were drawn by using camera lucida.

Before going further, I wish to express my thanks to Dr. S. NISHIMURA of the Seto Marine Biological Laboratory for reading the manuscript and giving me a chance consulting Whitelegge's paper, to Ass. Prof. M. Ogura of Tokai University for his generosity in collecting the samples, and to Prof. M. Yamada and Dr. T. Itô of Hokkaido University for their kindness in giving me the opportunity to study such an interesting animal.

Accalathura ochotensis, n. sp.

(Japanese name: Ô-uminanafushi) (Text-figures 1 and 2)

Description: Body dull yellow in alcohol, elongated and about 20 times as long as wide except both antennae in male holotype, while only 12 times as long as wide in female allotype. Eye lacking. Anterolateral angles slightly exceeding forward the rostral projection. Relative length of peraeonal somites approximately 6:9:14:14:14:9:2 in male holotype and 2:3:3:3:3:3:1 in female allotype. Seventh peraeonal somite

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^{*} Contributions from the Marine Science Museum, Tokai University, No. 40.

broader than long, with a prominent lobe on each posterolateral angle. The lobe extended over the first pleonal somite. First to fourth pleonal somites indistinct in median part but distinct in lateral part. Pleonal somites I-IV are almost equal in length. Fifth somite a little longer than the fourth. Sixth somite about three times as long as the fifth and without median cleft. A pair of pea-shaped structures are vaguely found on the sixth somite in dorsal view. Endopod of uropod extended as backward as the telson.

First antenna composed of 13 to 18 segments, and haired more thickly in male than in female. Second antenna composed of six peduncular segments in both sex and of 17 flagellar segments in male holotype but only 11 in female paratypes. Second antenna longer than the first in both sex.

Mandible with acute apex and three-segmented palp; first segment small, second rectangular with a seta, third with 14 setae on inner margin. First maxilla slender

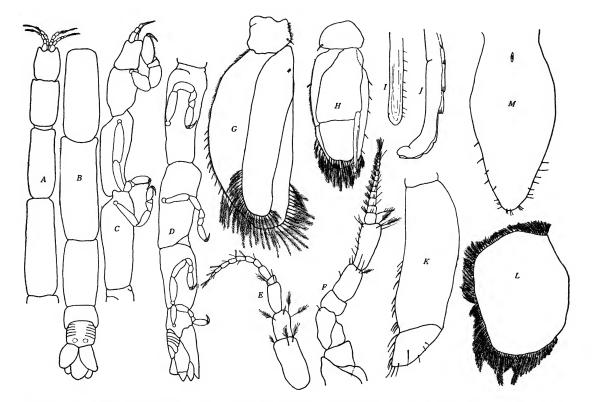


Fig. 1. Accalathura ochotensis, n. sp. A. Anterior part in dorsal view. B. Posterior part in dorsal view. C. Anterior part in lateral view. D. Posterior part in lateral view. E. First antenna of female. F. Second antenna of female. G. First pleopod. H. Second pleopod of male. I-J. Stylet of male second pleopod. K. Endopod of uropod. L. Exopod of uropod. M. Telson. (A-D and G-M, holotype male; E and F, allotype female).

with 19 sawlike teeth near the apex of outer lobe. Maxilliped with three free segments; basal segment extending slightly over proximal part of terminal segment.

Peraeopods I-III subchelate. Peraeopod I is stoutest; basis and ischium oblong; merus bowl-shaped with several setae on inner margin; carpus small and triangular with four setae on inner margin; propodus large with about 15 setae on inner margin; dactylus with a claw.

Peraeopods IV-VII are all normal walking legs; basis and ischium oblong; merus elongated and triangular; carpus triangular with four to five setae; propodus oblong with four to five serrated spines; dactylus with a craw at the tip. There are various

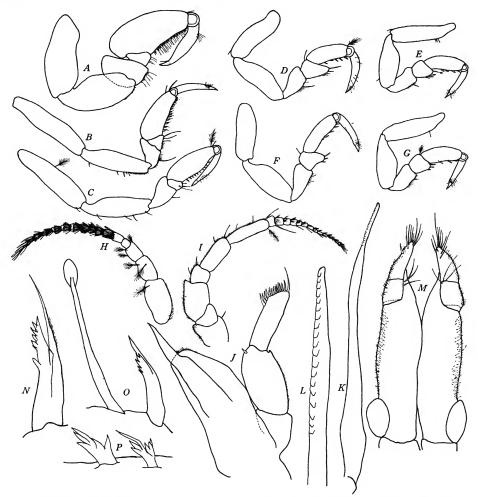


Fig. 2. Accalathura ochotensis, n. sp. A-G. First to seventh peraeopods. H. First antenna of male.
I. Second antenna of male. J. Mandible. K. First maxilla. L. Apical part of the same.
M. Maxilliped. N. Seta on propodus of second peraeopod. O. Setae on carpus of fifth peraeopod. P. Setae on propodus of second peraeopod. (A-P, holotype male).

types of setae on carpus or propodus of peraeopods.

Second pleopod seems to differ but slightly in both sides, though with a clublike stylet in male. Telson lanceolate in shape with only one statocyst near the medial basal part.

Material examined: $1 \, \circ$ (43.2mm in body length, holotype), $3 \, \circ \, \circ$ ($1 \, \circ \,$ allotype, 24.0mm in body length and $2 \, \circ \, \circ \,$ paratypes, $23.0 \, \sim \, 24.5 \, \text{mm}$ in body length), and one sexually undetermined individual, just after ecdysis (?). Type series are deposited as follows: Holotype (OMNH-Ar-422) and allotype (OMNH-Ar-423) at the Osaka Museum of Natural History. 2 paratypes (MSM-INV-76-088 $\sim \, 089$) at Marine Science Museum, Tokai University.

Locality and Date: Okhotsk Sea; latitude 44° 95. 0'N, longitude 144° 25.3' E; depth 390m; sandy silt; bottom water temperature 2.9°C; September 10, 1973.

Remarks: The present new species resembles most closely Accalathura gigas (Whitelegge) and A. gigantissima Kussakin, recorded respectively from Austraria waters and the Seyshells, and from the Antarctic Sea. The new species differs, however, from both by the following features: (1) less numerous segments in both antennae; (2) setal formula of maxilla; (3) less numerous setae on mandibular palp; and (4) shape of uropod.

REFERNCES

- Barnard, K. H. 1925. A revision of the family Anthuridae (Crustacea Isopoda), with remarks on certain morphological peculiarities. Linn. Soc. Zool., 36: 109-160.
- Hale, H. M. 1929. The crustaceans of South Australia, Part II, Adelaide, August 30: 201-380.
- Kussakin, O. G. 1967 Isopoda and Tanaidacea from the coastal zones of the Antarctic and subantarctic. Issledobaniya faunui morei 4 (12): 220–380.
- Monod, T. 1971. Sur un *Accalathura* de l'océan Indien. (Crustacés, Isopodes) Bull. Mus. Hist. nat, 5:335-343.
- Nierstraz, H. F. 1941. Isopoda genuia. III. Gnathiidea, Anthuridea, Valvifera, Asellota, Phreatoicoidea, Siboga-Expedite, fasc. 32d: 229-308.
- Stebbing, T. R. R. 1904. Marine Crustaceans 12. Isopoda, with description of a new genus. Fauna and Geogr. Maldive and Laccadive Archipelagoes, 2., Part 3: 699-721. Pls. XLIX-LIII.
- Whitelegge, T. 1901. Scientific Results of the "Thetis Expedition" Crustacea pt.2: Isopoda, pt.1. Mem. Austral. Mus., 4 pt. 3: 201-246, Pl. 49A.